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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,836	01/03/2002	Masatsugu Shimizu	FUSA 19.314	7231
26304	7590	11/07/2005	EXAMINER TORRES, JUAN A	
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			ART UNIT 2631	PAPER NUMBER

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,836

Applicant(s)

SHIMIZU, MASATSUGU

Examiner

Juan A. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10, 12-17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) 6, 11, 18 and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4, 8, 9, 12-16 and 19-23 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7, 10, 17 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election of group I: claims 1-5; 7-10, 12-17; and 19-24 in the reply filed on 10/19/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 6, 11, 18 and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/19/2005.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the identification information decoder for decoding the identification information that has been received and holding likelihood calculated when the decoding is performed; as claimed in claims 2, 8, 13 and 20; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "90a" and "91" have both been used to designate "Radio Receiver"; and reference characters "80b" and "83" have both been used to designate "Radio Transmitter" (see figure 8). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figures 18-28 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (see section background of the invention pages 1-17 of the disclosure). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because there are some informalities, such as:

a) In line 17 of page 6 the recitation "demultiplexer 73" is improper because the demultiplexer shown in figure 18 is indicated with number 15 (see line 15 of page 6); it is suggested to be changed to "demultiplexer 15".

b) In lines 25-28 the recitation "The channel codec 60b on the receiving side then subjects the rate-matched data (encoded data) to convolutional decoding processing or turbo encoding processing to thereby decode the data" is improper; it is suggested to be changed to "The channel codec 60b on the receiving side then subjects the rate-matched data (encoded data) to convolutional decoding processing or turbo decoding processing to thereby decode the data".

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 7, 5, 10, 17 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by admitted prior art.

As per claims 1 and 7 admitted prior art discloses storing multiplexed data that has been received (figure 18 blocks 13-14 page 6 lines 3-17); discriminating, frame by frame, frame-data length information on each channel based upon the identification information that has been received (figure 22 page 6 line 15 to page 7 line 5); deciding, on a per-channel basis that the largest number of items of frame-data length information that are the same among the items of frame-data length information in a plurality of frames within a transmission time interval is frame-data length information common to all of said plurality of frames within the transmission time interval (figure 22 page 6 line 15 to page 7 line 5); identifying bit length per frame of each channel based upon the frame-data length information that has been decided, and demultiplexing multiplexed

data, which has been stored in the storage unit, channel by channel on the basis of the bit length (figure 18 block 15 and figure 22 page 7 lines 7-21); and joining and decoding, in an amount equivalent to the transmission time interval, frame data that has been demultiplexed on a per-channel basis (figure 18 block 16 page 7 line 22 to page 8 line 13).

As per claims 5 and 10 admitted prior art discloses storing multiplexed data that has been received (figure 18 blocks 13-14 page 6 lines 3-17); discriminating, frame by frame, the frame-data length information on each channel based upon the identification information that has been received (figure 22 page 6 line 15 to page 7 line 5); identifying bit length per frame of each channel based upon the frame-data length information that has been discriminated, regarding that frame data of each of the channels has been multiplexed in order of decreasing transmission time interval and demultiplexing the multiplexed data, which has been stored in said storage unit, on the basis of the multiplexing sequence and the identified bit length of each channel (figure 18 block 15 and figure 22 page 7 lines 7-21); and joining and decoding, in an amount equivalent to the respective transmission time interval, the frame data that has been demultiplexed on a per-channel basis (figure 18 block 16 page 7 line 22 to page 8 line 13).

As per claims 17 and 24 admitted prior art discloses a CDMA communication system for encoding transmit data of each of a plurality of transport channels at a predetermined transmission time interval (TTI), partitioning the encoded data of each transport channel at a frame period to obtain frame data of a prescribed bit length, multiplexing and transmitting the frame data of each transport channel, and transmitting,

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frame by frame, combination information (TFCI) of transport formats (TFIs) that specify the frame data length of each transport channel (figures 23-28 page 8 line 25 to page 17 line 27) comprising storing received multiplexed data and decoding a TFCI frame by frame (figure 18 blocks 13-14 page 6 lines 3-17); discriminating, frame by frame, the transport format (TFI) on each transport channel based upon the TFCI that has been decoded (figure 22 page 6 line 15 to page 7 line 5); identifying bit length per frame of each transport channel based upon the transport format (TFI) discriminated regarding that frame data of each of the transport channels has been multiplexed in order of decreasing transmission time interval (TTI) and demultiplexing the stored multiplexed data channel by channel on the basis of the multiplexing sequence and identified bit length (figure 18 block 15 and figure 22 page 7 lines 7-21); and joining and decoding, in an amount equivalent to the transmission time interval, frame data that has been demultiplexed on a per-transport-channel basis (figure 18 block 16 page 7 line 22 to page 8 line 13).

Allowable Subject Matter

Claims 2-4, 8-10, 12-16 and 19-23 are allowed.

The following is an examiner's statement of reasons for allowance: claims 2-4, 8-10, 12-16 and 19-23 are allowed because the references cited fail to teach, as applicant has, comparing, on a per-channel basis, frame-data length information of a plurality of frames within respective ones of the transmission time intervals and, if frame-data length information differs, deciding, by using a likelihood, frame-data length information

that is common to all of the plurality of frames within the transmission time interval, so, correcting erroneous frame-data length information, as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uga (US 20030039236 A1) discloses transport format decision method determining a transport format of transmitted data based on a Reed-Muller coded TFCI (Transport Format Combination Indicator) transferred in association with the transmitted data, in a communication system defined by 3rd Generation Partnership Project (3GPP), but doesn't disclose that if frame-data length information differs, deciding, by using the likelihood or majority decision, the frame-data length information that is common to all of the plurality of frames within the transmission time interval . Sepponen (US 20020015405 A1) discloses error correction of important data fields in data packet communications including the TFI, but doesn't disclose that if frame-data length information differs, deciding, by using the likelihood or majority decision, the frame-data length information. Belaiche (US 6510137 B1) discloses configuring a CDMA telecommunication system including Transport format correction, but doesn't disclose that if frame-data length information differs, deciding, by using the likelihood or majority decision, the frame-data length information. EURESCOM (Review of UMTS air

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interface, 1999) in pages 70 and 90 discloses a receiver similar to the described in figure 5 of the disclosure, but doesn't disclose correcting erroneous frame-data length information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres
10-25-2005


KEVIN BURD
PRIMARY EXAMINER